

# Premarital Sexual Practice and Associated Factors among Preparatory School Students in Jimma Town, Oromia Region, South West Ethiopia

Girma Abate<sup>1</sup> (MPH)    Mr Fasil Tessema<sup>2</sup> (Associate Professor)    Mr Abiot Girma<sup>3</sup> (MPH)

## Abstract

**Background:** Premarital sexual practice increases adolescents risk for infection with HIV and other STDs. Adolescents who begin early sexual activity are more likely to have high-risk sex or multiple partners and are less likely to use condom. **Objective:** The purpose of this study was to assess the prevalence of premarital sexual practice and associated factors among preparatory school students in Jimma town. **Methods:** Institution based cross-sectional study was conducted on a random sample of 532 preparatory school students in Jimma town from March 13-25, 2015 and data was collected using self-administered questionnaire. Descriptive statistics was used, mean and standard deviation for continuous variables and frequency for categorical variables. Logistic regression with 95% confidence intervals was used to determine independent predictors of premarital sexual practice and p-value less than 0.05 was to declare statistical significance. **Results:** Of 523 study participants, 21.0% (63.6% males and 36.4% females) reported having practiced premarital sexual intercourse. The mean age at first sexual intercourse was 16.3 with SD of ( $\pm 1.7$ ) and 17.2 with SD of ( $\pm 1.1$ ) years for males and females, respectively. Being age  $\geq 18$  [AOR(95% CI)=3.8(1.6, 9.2)], living away from parent [AOR(95% CI)=6.6(1.9, 23.7)], khat chewing [AOR(95% CI)=9.8(3.5, 27.6)], peer pressure [AOR(95% CI)=3.1(1.3, 7.5)] and being dissatisfied with parental connection [AOR(95% CI)=3.3(1.1, 9.9)] were significantly associated with premarital sexual practice. **Conclusions and recommendations:** From this, we concluded that there is a high prevalence of premarital sexual practices among students. Therefore, Intervention that emphasizes different domains of the high risk factors [substance abuse like khat, peer pressure] and protective factors [increase student-parent connection] in an integrated manner may be the most effective strategies.

## 1. Introduction

Healthy sexual development is an important goal of adolescence. It is a developmental process that when attained successfully can lead to healthy intimate and sexual relationships, self-efficacy and autonomy in one's sexual decision-making, and establishment of one's sexual identity [1].

Evidence showed that nearly half of the global population was less than 25 years old and almost 90% live in developing countries. About 1.7 billion people of the world's population were between the ages of 10 and 24 [2].

According to the 2007 Ethiopian census, youths aged 15–24 years were more than 15.2 million which contributes to 20.6% of the entire population [3].

Data from the DHS from the Africa region show that, in 7 out of 9 countries surveyed, more than half of unmarried woman in their reproductive years (15-49) have had sexual intercourse at least once [4].

According to Ethiopian Demographic and Health Survey (EDHS) 2011 report, 29% of women had first sexual intercourse before age 15 years old and 62% of women before age 18 years old [5].

In Ethiopia an increasing number of adolescents are involved in unsafe sexual practices and hence face undesired health outcomes such as unplanned pregnancy, too early childbirth, unsafe abortion and sexually transmitted disease [6].

Studies conducted so far on pre-marital sexual practices and associated factors in Ethiopia are few in number and there are no current data on this topic in the study area.

## 2. Methodology

Institutional based cross sectional study design was conducted among preparatory school students in Jimma town, southwest Ethiopia in 2015.

Sample size was computed using two population proportions formula. Important risk factors such as peer pressure, living arrangement, religious visit, alcohol consumption and prevalence of premarital sexual practice; were considered for calculating the sample size and finally the largest sample size was selected. Substance use (khat chewing) gives maximum sample size.

- ❖  $P_1$  = proportion of premarital sexual practice among khat chewer = 37.5%; and
- ❖  $P_2$  = proportion of premarital sexual practice among non khat chewer = 20.4%; [8]
- ❖ Confidence level or  $1 - \alpha = 95\%$
- ❖ Power or  $1 - \beta = 80\%$
- ❖ Population allocation ratio:  $n_2:n_1 = 1:1$

With the above assumptions, the sample size was calculated using STATCAL in EPI INFO program version 7, sample size and power calculation for cross-sectional studies was used to calculate the sample size needed and considering a 10% non-response rate the sample size became 532 students.

The study participants were selected by using simple random sampling technique. First, sections were selected by simple random sampling from each school. Then, students were selected based on proportional allocation to their size. Finally, in order to select the study participants, a simple random sampling method was used by using name list of the students from the registrar office of schools.

Data was collected from March 13-25, 2015 using self-administered questionnaire. The questionnaire had four parts: socio-demographic characteristic, sexual history, individual and life style issues and communication with family members and friends.

Data quality was ensured through pretest was done on non-selected preparatory school students, the questionnaire prepared in English and translated to Amharic and retranslated to English to ensure its consistency, supervisors and school community were communicated and orientation was given for data collectors and study participants on the purpose of the study.

Data was entered using EpiData version 3.1. SPSS version 20 was used for analysis. Descriptive statistics was used, mean and standard deviation for continuous variables and frequency for categorical variables. Logistic regression with 95% confidence intervals was used to determine independent predictors of premarital sexual practice and p-value less than 0.05 was to declare statistical significance.

Ethical clearance was obtained from ethical review board of Jimma University. Permission was sought from Jimma preparatory schools. The study participants right to refuse was respected. Identification of study participants by name was avoided to assure the confidentiality of the information obtained.

### **3. Results**

#### **3.1 Socio-demographic characteristics of respondents**

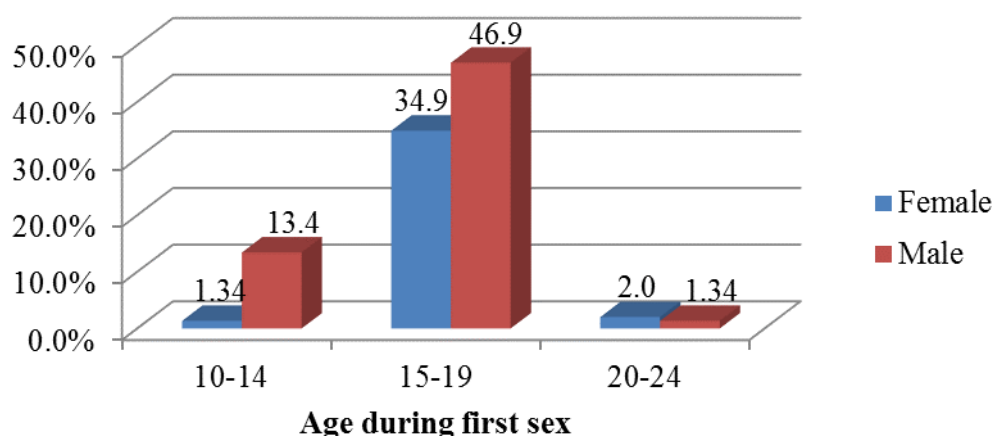
A sample of 532 students were selected to participate in the survey; and 523(98.3%) participated with non-response rate of 9(1.7%). Among the respondents, 303 (57.9%) and 220 (42.1%) were males and females, respectively and their age ranged from 16 to 25 years with a mean age of 17.8 and SD of ( $\pm 1.03$ ) years. Almost all, 517 (98.9%), were unmarried.

**Table 5:** Distribution of socio-demographic characteristics among preparatory school students in Jimma town, 2015.

Variables	Number of students	Percent
<b>Sex</b>		
Male	303	57.9
Female	220	42.1
<b>Age</b>		
15-19	510	97.5
20-24	11	2.1
≥25	2	0.4
<b>Grade level</b>		
11 <sup>th</sup> grade	244	46.7
12 <sup>th</sup> grade	279	53.3
<b>Religion</b>		
Orthodox	217	41.5
Muslim	157	30.0
Protestant	116	22.2
Catholic	11	2.1
Others	22	54.2
<b>Ethnicity</b>		
Oromo	256	48.9
Amhara	134	25.6
Others	133	25.4
<b>Previous residence</b>		
Urban	469	89.7
Rural	54	10.3
<b>With whom are you living now</b>		
With parent	467	89.3
Without parent	56	10.7
<b>Father's education level</b>		
Illiterate	27	5.2
Grade 1-6	76	14.5
Grade 7-12	141	27.0
Above 12+2	279	53.3
<b>Mother's education level</b>		
Illiterate	85	16.3
Grade 1-6	146	27.9
Grade 7-12	179	34.2
Above 12+2	131	21.6

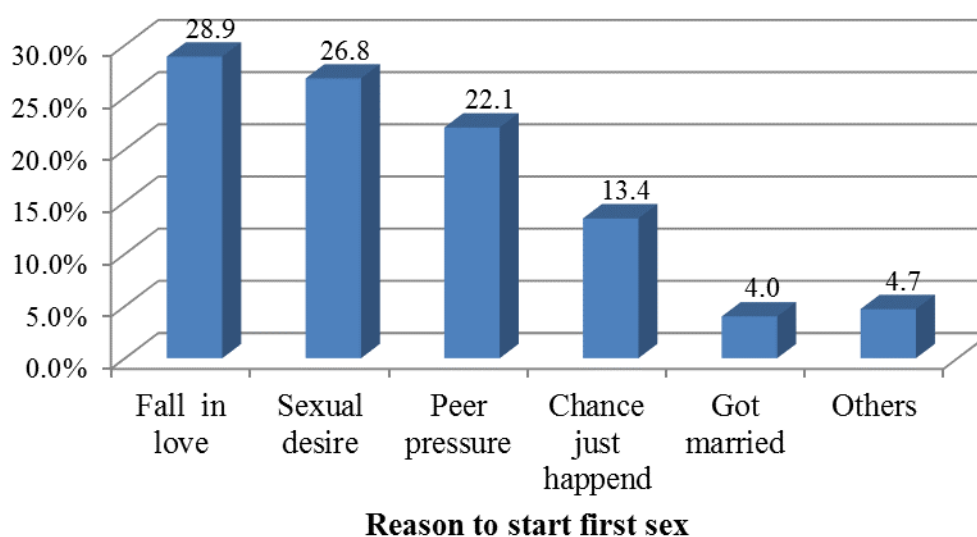
### 3.2 Premarital sexual history of students

On sexual experiences, 149 (28.5%) reported having sexual intercourse. One hundred ten (21%) of the study population reported to have premarital sexual intercourse at the time of the survey, of which 70(63.4%) were males and 40(36.6%) were females.



**Figure 1:** Age during first sex for male and female among preparatory school students in Jimma town, 2015  
Among sexually active students during the time of the survey, 47 (42.7%) were attending 11<sup>th</sup> grade and 63 (57.3%) were attending 12<sup>th</sup> grade.

Reasons given by the respondents to start sexual practice include fall in love, had desire, peer pressure, chance just happened and got married.



**Figure 2:** Reason to start first sex among preparatory school students in Jimma town, 2015.

### 3.3 Factors associated with premarital sexual practice

Variables found to have significant association with the premarital sexual practice on binary logistic regression analysis and multiple regression analysis are shown in Table 2.

**Table 2:** Comparison of premarital sexual practice by socio-demographic and other variables among preparatory school students in Jimma town, 2015.

Variables	Premarital sexual practice		COR(95% CI)	AOR(95%CI)
	Yes n (%)	No n (%)		
<b>Age</b>				
<18	46(11.8)	344(88.2)	1.00	<b>1.00</b>
≥18	64(48.1)	69(51.8)	6.9[4.4, 10.9]*	<b>3.8[1.6, 9.2]**</b>
<b>Previous resident</b>				
Urban	92(19.6)	377(80.4)	0.5[0.3, 0.9]*	<b>23.5[4.5, 122]**</b>
Rural	18(33.3)	36(66.7)	1.00	<b>1.00</b>
<b>Living arrangement</b>				
With parent	72(16.8)	356(83.2)	1.00	<b>1.00</b>
Without parent	38(40.0)	57(60.0)	3.3[2.0, 5.3]*	<b>6.6[1.9, 23.7]**</b>
<b>Mother educational level</b>				
Illiterate	48(57.6)	37(42.3)	6.0[3.2, 11.5]*	<b>1.7[0.4, 7.4]</b>
Grade 1-6	22(15.1)	124(84.9)	0.8[0.4, 1.6]	<b>0.2[0.04, 0.9]**</b>
Grade 7-12	20(11.2)	159(88.8)	0.6[0.3, 1.1]	<b>0.2[0.4, 0.6]**</b>
Above 12+2	20(17.7)	93(82.3)	1.00	<b>1.00</b>
<b>Attend religious service</b>				
More than one/week	10(4.0)	238(96.0)	1.00	<b>1.00</b>
Once a week	49(25.9)	140(74.1)	8.3[4.1, 16.9]*	<b>2.5[0.7, 8.6]</b>
Never	51(59.3)	35(40.7)	34.7[16.1, 74.5]*	<b>31.9[8.4, 121]**</b>
<b>Alcohol consumption</b>				
Yes	95(55.9)	75(44.1)	28.5[15.7, 51.9]*	<b>4.9[1.9, 12.7]**</b>
No	15(4.2)	338(95.8)	1.00	<b>1.00</b>
<b>Khat chewing</b>				
Yes	53(58.9)	37(41.1)	9.5[5.7, 15.6]*	<b>9.8[3.5, 27.6]**</b>
No	57(13.2)	376(86.8)	1.00	<b>1.00</b>
<b>Student-family communication</b>				
Yes	11(7.5)	147(92.5)	1.00	<b>1.00</b>
No	99(26.8)	277(73.2)	4.4[2.3, 8.5]*	<b>3.8[1.3, 11.1]**</b>
<b>Peer pressure</b>				
Yes	66(44.3)	83(55.7)	5.9[3.8, 9.4]*	<b>3.1[1.3, 7.5]**</b>
No	44(11.8)	330(88.2)	1.00	<b>1.00</b>
<b>Parental control</b>				
Yes	82(50.3)	81(49.7)	1.00	<b>1.00</b>
No	28(7.8)	332(92.2)	0.08[0.05, 0.1]*	<b>0.09[0.03, 0.3]**</b>
<b>Parental connectedness</b>				
Disagree	31(9.1)	311(90.9)	0.13[0.1, 0.2]*	<b>3.3[1.1, 9.9]**</b>
Agree	79(43.6)	102(56.4)	1.00	<b>1.00</b>

\* p<0.25, \*\* p<0.05

### 3.4 Consequence of premarital sexual practice

Among sexually actives students in the past twelve months 34(30.9%) of them did unplanned sex first time. Among 57 female who ever had sexual intercourse 11(19.3%) got pregnant at least once in their life time.

**Table 3:** Consequences of premarital sexual practice among preparatory school students in Jimma town, 2015.

Variables	Number of students	Percent
<b>You/r partner use contraception at first sex</b>		
Yes	56	37.6
No	93	62.4
<b>You/r partner pregnant in your sexual life</b>		
Yes	16	10.7
No	133	89.3
<b>The pregnancy planned</b>		
Yes	5	31.3
No	11	68.7
<b>You/r couple ever experienced abortion</b>		
Yes	12	8.1
No	137	91.9
<b>Who perform abortion for you/r couple</b>		
Health professional	7	58.3
Traditional hillers	3	25.0
Others	2	16.7
<b>You/r partner had got treatment for STDs during your sexual life</b>		
Yes	24	16.1
No	125	83.9
<b>Number of sexual partner in the past 12 months</b>		
One	80	72.72
Two	15	13.64
More than two	15	13.63

#### 4. Discussion

This study revealed that more than one fifth (21%) of the respondents had premarital sexual intercourse at the time of the survey, of which 63.4% were males. These findings were similar with previous studies among school adolescents [7, 8], but lower when compared to the results of other previous studies among school adolescents in Ethiopia [9, 10]. This might be due to the difference between study population and study area. On the other hand, this finding is relatively high when compared to study done in high school adolescents in Aletawodo town with the prevalence of premarital sexual intercourse of 18.3% and another study among in-school youths of Shendi town was 19%. This discrepancy might be due to variation in the prevalence of risky behaviours between the two study populations and the difference between study populations [11, 12].

In this study, the mean age for males at first sexual intercourse was relatively lower than a female which is almost similar to other studies among in school adolescents [8, 12]. This could be due to the high expectation of virginity before marriage for females than males and a lesser cultural expectation for males to remain virgin until marriage than females in our society, due to low parental control for males than females and the difference in the opportunity costs of becoming sexually active (and the subsequent risks of unintended pregnancy) [9]. Among those students who had premarital sex, the majority had their first sexual intercourse under the ages of 18. This finding is slightly higher for female but almost the same for male when compared to a study done in Alkan University College in Addis Ababa [13].

Majority of student (67.5%) preferred to discuss about sexual issues with their peers of the same sex than family. This result is similar to a study done in Dire Dawa, It showed that 74.7% of students preferred their peers than parent to discuss about their sexual and reproductive health issues. Students discussed about sexual matters more with peers than family [14]. This could be due to cultural taboo and feel ashamed affect student-family communication on sexual matters [15].

Among female students who ever had sexual intercourse significant number of them were get pregnant at least once in their life time among these, most of the pregnancy were unplanned and all of them were terminated through induced abortion. This result is similar to a study done among Aletawodo high school and in-school youths of Shendi town [11, 12].

The rate of sex with commercial sex workers in males agrees with a study done in Madawalabu and Ambo [16, 17]. But higher to the report from a study conducted among in-school youths in Shendi town [12]. This discrepancy might be due to variation in the prevalence of risky behaviours between the two study populations, but lower than; the study among high school students conducted in Nekemte towns [8]. The reason

could be respondents might hide the truth being shy to disclose their sexual exposure history.

Studies conducted in Aletawodo high school revealed that the prevalence of self-reported STIs was 20.9% [11]. In this study STDs among sexually experienced students were 16.1%, which is lower than the above results. But, the actual number might be higher as people may not so open in disclosing such issues.

Condom used during first sexual intercourse in this study is about 33.6%. This finding is higher than similar study among school adolescents in Ambo [17]. This could be due to fact that availability of information about condom has got an impact on condom use through time. Lower than from a study result 64.3% among adolescents in Bahir Dar town [10]. Moreover the behavioural surveillance survey (BSS) result also revealed that 52.4% (64.2% males and 40% females) in school adolescent had used condom during their last sexual intercourse [9, 17, 18]. This might be explained by the difference in the study subjects, study area and period.

Students age 18 and above were more likely to involve in premarital sexual practice than students who were age below 18 years old. This finding also goes in line with study conducted in Alamata [7] and Alkan University College in Addis Ababa [13]. This shows that as the age of school adolescent's increase, there is higher probability to involve in sexual practice.

Students from urban families were more likely to engage in pre-marital sex than those from rural area. This finding is consistent with study conducted among in-school adolescents in eastern Ethiopia [9]. This might be due to the more liberal life styles in urban areas compared to cultural conservatism in rural areas, and might also be attributed to easiness of reporting premarital sexual debut by urban students.

Students who had peer pressure were three times more likely to initiate pre-marital sexual debut than their counterparts. This finding was in line with other similar studies [10, 14]; possibly it might be; peers play important part in deciding personality and behaviour among adolescents [7].

Compared to respondents who do not chew khat, those who are ever chewing khat were more likely to initiate premarital sex earlier. This finding was in line with other study in Bahir Dar town [10]. The possible explanation for this association could be due to loss of track of mind induced by khat chewing which motivated them to have casual and early sexual initiation [13].

In this study, alcohol users were more likely to begin premarital sexual intercourse earlier than those who didn't use alcohol and consistent with study done in other parts of Ethiopia [15]. The possible reason might be, drinking alcohol decrease self-control and predispose to risky behaviour such as sexual intercourse [20].

Never attending religious service was negatively associated with engaging in premarital sexual practices which is in line with study conducted in Bahir Dar town; showed that, Students those attained religious services two or more times a week were five times less likely to practice pre-marital sexual debut than those attained the service less than two times a week. This might be due to that most religious organization advocate abstinence before marriage [10].

In this study, students who live away from parent were more likely to engage into premarital sexual practice than those who were live with parents. This is similar with studies done in Boditti town and Jimma zone [21, 22]. Again the result of this study is also consistent with a study done in Kathmandu, Nepal; Youths who had good relationship with their parents had less premarital sex experience than youths having poor relationship [19]. This could be due to lack of opportunity for parental monitoring and guidance. Those students whose parents live in rural areas often attend their education in rental house in urban place. This living arrangement provides the opportunity of being free from parental supervision so that the student will have freedom of exercising sexual issues.

## 5. Conclusion and Recommendation

A large number of school adolescents were engaged in sexual practice before marriage. Majority of adolescents were males.

The factors associated with this were socio-demographic factors (age, parental educational level, previous residence, and living arrangement), individual and life style factors (substance abuse, sexual maturation and religious visit), family factors (perceived parental connectedness, perceived parental control, student-family communication) and social factors (peer pressure).

So, community and/or school health interventions are needed to reduce the premarital sexual practice among in school adolescents to prevent sexually related problems by providing due attention for adolescents with above characteristics.

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